

### Remarks

**Status of the Claims:** Claims 1, 3-12 and 14-20 are pending. Claim 13 has been cancelled.

**Allowed Claims:** The Examiner has indicated that Claims 1, 3-9 and 14-20 are allowed.

**Rejected Claims:** Claims 10-13 directed to composites having improved melt strength comprised of ethylene vinyl C<sub>2-4</sub> carboxylated copolymers and clays ion-exchanged and intercalated with dimethyl dehydrogenated tallow quaternary ammonium ion have been rejected.

**Amendments to the Rejected Claims:** Claim 10 has been amended so that it now specifies the melt index and complex viscosity of the ethylene copolymer composite. Furthermore, the claim now excludes the presence of ingredients which would materially alter the basic and novel properties of the composite since it now specifies the composites consist essentially of the ethylene-vinyl carboxylate copolymer and the clay modified with 2M2HT. Claims 11 and 12 continue to depend from Claim 10 and Claim 13, which previously recited the melt index and complex viscosity limitations now incorporated in Claim 10, has been cancelled.

More specifically, whereas former Claim 10 previously only indicated that the composites had improved melt strength, newly amended Claim 10 now defines the melt strength improvement by specifying that the complex viscosity be greater than 1.10. The melt index of the composite is also specified and thus precludes expanded or foamed and crosslinked composites. The presence of blowing agents, crosslinking agents and crosslinking coagents of the types typically employed to produce foamed polymer materials and which would affect the melt index and complex viscosity of Applicants' composites are now excluded by the consisting essentially of language.

**Amended Claims 10-12 are not anticipated or obvious from Karande, et al:** Karande, et al., disclose the use of olefin polymers having polar functionality, including EVA, and clays intercalated with 2M2HT; however, the reference is completely silent with regard to the melt index and complex viscosity. There is no mention of either of these properties in the reference or indication of their role in the formulation of composites of any type. As a result, the subject matter

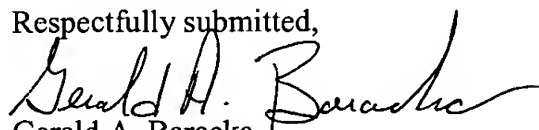
of Applicants' claims is not anticipated by Karande, et al., and the Examiner is respectfully requested to withdraw the 102(b) rejection.

Furthermore, Applicants submit Claims 10-12 would not be obvious to one skilled in the art from the teachings of Karande, et al. Applicants take strong exception to the Examiner's conclusion that Applicants' composites and those disclosed by Karande, et al., are "essentially the same" and they submit that the rheological properties of Karande, et al.'s expanded, i.e., foamed, polymer composites are significantly different than Applicants' composites. How can a foamed material which has a cellular structure obtained by capturing gas bubbles within a solid or liquid mass have a melt index even remotely similar to that specified for Applicants' composites? In fact, skilled artisans will appreciate that melt index measurements are not typically performed with foams and may not even be possible. Those skilled in the art will clearly recognize the unobvious differences which exist between composites of the type claimed by Applicants' and those disclosed by Karande, et al., and further proof by Applicants should therefore not be required.

Entry of this amendment is requested since Applicants are removing certain issues from consideration and it is Applicants' belief that all of the claims are now in condition for allowance. Furthermore, the amendments merely require cursory review by the Examiner since the amended claim language was previously present in the cancelled claim.

Favorable action is requested; however, should the Examiner wish to discuss the foregoing or any matter of form in an effort to advance the rejected claims to allowance, he is urged to phone the undersigned.

Respectfully submitted,

  
Gerald A. Baracka

Equistar Chemicals, LP  
11530 Northlake Drive  
Cincinnati, Ohio  
513-530-4218  
U.S. Serial No. 10/027,742